Claims

The claims are amended as follows:

1. (Currently Amended) A distance based distributed online game server system for providing online game of an imaginary game world with various characters by dividing the imaginary game world into a plurality of regions and managing online game based on the regions, the distance based distributed online game server system comprising:

a session server for authenticating a player and providing information including region information and character information, wherein the character information has information of game character selected by the player;

a database server 102-for managing player information including account information of the player and character information and transmitting corresponding player information to the session server when the session server requests to have player information of a player;

a non-player character (NPC) server for managing data and processing scripts of nonplayer character by artificial intelligence, wherein the non-player character is a game character that are not selected by the player;

a game server for providing a game service to payers-players within a region assigned by the session server according to the region information and managing the game service of associated with the region by dividing the region into cells, wherein the game server calls an event processing function upon receiving an event, the event processing function to assign an available thread from a thread pool to process the event; and

a real-time download server for provides a real-time downloading service to the player.

(Original) The distance based distributed online game server system as recited in claim 1, wherein the session server provides the region information including a server address and a port number of the game server assigned to a player within corresponding region.

- (Original) The distance based distributed online game server system as recited in claim 1, wherein the game server is managed by the NPC server, the database server and the session server.
- 4. (Original) The distance based distributed online game server system as recited in claim 1, wherein when a region is added, a game server is added to manage the region.
- 5. (Original) The distance based distributed online game server system as recited in claim 1, wherein a transmission control protocol (TCP) or a reliable user datagram protocol (RUDP) is used in communication between the player for obtaining reliability of the system and an area of interest method is used for reducing system load.
- 6. (Original) The distance based distributed online game server system as recited in claim 1, wherein movements or changes of characters are predicted by dead-reckoning within a limit of error.